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(County society secretaries are requested to notify California Medicine promptly when changes are indicated in their roster information.)

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Pres., William Kaiser, 3020 Regent St., Berkeley.
Secy., Robert Leet, 3310 Elm St., Oakland.

Butte-Glenn Medical Society. Meets Fourth Thursday.
Pres., W. S. Lawrence, 405 Sycamore, Gridley.
Secy., Rufus C. Rucker, 188 E. 5th St., Chico.

Fresno County Medical Society, 2811 North Blackstone, Fresno 3. Meets Second Tuesday, 6:30 p.m., Sunnyside Country Club.
Pres., Verne G. Ghormley, 3032 Tulare St., Fresno.
Secy., John P. Conrad, 716 Olive, Fresno.

Humboldt County Medical Society. Meets Second Thursday.
Pres., T. W. Loring, 715 I St., Eureka.
Secy., George B. Watson, 539 G St., Eureka.

Imperial County Medical Society. Meets Second Tuesday, 8 p.m., Pioneer Memorial Hospital, Brawley.
Pres., Robert J. Westcott, 239 S. 8th St., El Centro.
Secy., Ernest Brock, 200 S. Imperial Ave., Imperial.

Inyo-Mono County Medical Society. Meets Fourth Tuesday except December, January, February.
Pres., J. Lloyd Mason, 512 West Line, Bishop.
Secy., Robert W. Denton, 611 W. Line, Bishop.

Kern County Medical Society, 2603 "G" Street, Bakersfield. Meets Third Tuesday, 7:30 p.m., Stockdale Country Club except June, July, August.
Pres., R. W. Burnett, 515 Truxtun Ave., Bakersfield.
Secy., W. H. Moore, Jr. 1715 28th St., Bakersfield.

Kings County Medical Society. Meets Second Monday, 8:00 p.m., Legion Hall, Hanford.
Pres., Harold J. Jacob, Corcoran.
Secy., George D. Guernsey, 214 Heinlen St., Lemoore.

Lassen-Plumas-Modoc County Medical Society. Meets on call.
Pres., W. B. McKnight, Quincy.
Secy., W. C. Batson, Greenville.

Los Angeles County Medical Assn., 1925 Wilshire Blvd., Los Angeles 57. Meets First and Third Thursdays, 1925 Wilshire Blvd., Los Angeles.
Pres., Edward C. Rosenow, Jr., 65 N. Madison Ave., Pasadena.
Secy., J. Norman O'Neill, 1930 Wilshire Blvd., Los Angeles 57.

Madera County Medical Society.
Pres., Coe T. Swift, 501 E. Yosemite Ave., Madera.
Secy., Vilhjalmur J. Guttormsson, 501 E. Yosemite Ave., Madera.

Marin County Medical Society, 1703 Fifth Ave., San Rafael. Meets Fourth Thursday of every month, 7:00 p.m.
Pres., John W. Culmer, 1703 5th Ave., San Rafael.
Secy., Russell R. Klein, 1703 5th Ave., San Rafael.

Mendocino-Lake County Medical Society.
Pres., N. E. Bradford, Box D, Boonville.
Secy., R. B. Smalley, 361 S. Main, Willits.

Merced County Medical Society. Meets Fourth Thursday, Hotel Tioga, Merced.
Pres., Shelby Hicks, Shaffer Bldg., Merced.
Secy., Gerald D. Wood, 544 West 25th St., Merced.

Monterey County Medical Society, P. O. Box 308, Salinas. Meets First Tuesday.
Pres., Clyn Smith, Jr., Cass St. at Carmelita, Monterey.
Secy., Seymour Turner, 921 E. Alisal St., Salinas.

Napa County Medical Society. Meets Second Wednesday.
Pres., Donald B. Marchus, 2020 Jefferson St., Napa.
Secy., Robert C. Ashley, 1775 Lincoln, Napa.

Orange County Medical Association, 1226 N. Broadway, Santa Ana. Meets First Tuesday, 7:00 p.m.
Pres., Frederick T. Hunt, 1616 N. Broadway, Santa Ana.
Secy., Robert T. Garrett, 210 Del Mar Ave., San Clemente.

Placer-Nevada-Sierra County Medical Society. Meets every second Wednesday of each month.
Pres., Nathan A. Dubin, Lincoln.
Secy., T. J. Rossitto, 1166 High St., Auburn.

Riverside County Medical Association, 4175 Brockton Ave., Riverside. Meets Second Monday, 8:00 p.m., El Loro Room, Mission Inn.
Pres., J. Harold Batzle, 4046 Brockton Ave., Riverside.
Secy., Donald Abbott, 4029 Brockton Ave., Riverside.

Sacramento Society for Medical Improvement, 2731 Capitol Ave., Sacramento. Meets Third Tuesday, 8:30 p.m., Sutter Hospital Auditorium.
Pres., Edmund E. Simpson, 2615 Eye St., Sacramento.
Secy., Paul G. Larson, 2901 Capitol Ave., Sacramento.

San Benito County Medical Society. Meets First Thursday, Hazel Hawkins Memorial Hospital, Hollister.
Pres., Kent S. Taylor, 345 Fifth St., Hollister.
Secy., R. L. Hull, Bank of America Bldg., Hollister.

San Bernardino County Medical Society, 615 D St., San Bernardino. Meets First Tuesday 8:00 p.m., San Bernardino County Charity Hospital.
Pres., Frank C. Melone, 124 East "F" St., Ontario.
Secy., Wendell L. Ogden, 1066 East Base Line, San Bernardino.

San Diego County Medical Society, 101 Medical-Dental Bldg., San Diego 1. Meets Second Tuesday, Mission Valley Country Club, 950 West Camino Del Rio.
Pres., Maurice J. Brown, 2001 Fourth Ave., San Diego.
Secy., James I. Knott, 3712 30th St., San Diego 4.

San Francisco Medical Society, 250 Masonic Ave., San Francisco 18. Meets Second Tuesday, 8:15 p.m., 250 Masonic Ave., San Francisco 18.
Pres., Matthew N. Hosmer, 250 Masonic Ave., San Francisco 18.
Secy., Robert C. Combs, 250 Masonic Ave., San Francisco 18.

San Joaquin County Medical Society. Meets First Thursday, 8:15 p.m., 936 N. Commerce St., Stockton.
Pres., Louis P. Armanino, 2633 Pacific Ave., Stockton.
Secy., F. A. McGuire, 307 Medico-Dental Bldg., Stockton.

San Luis Obispo County Medical Society. Meets Third Saturday, 7:00 p.m., Anderson Hotel, San Luis Obispo.
Pres., J. B. Smith, 1405 Garden St., San Luis Obispo.
Secy., Anthony V. Keese, P. O. Box 319, San Luis Obispo.

San Mateo County Medical Society, 122 Second Ave., San Mateo. Meets Third Tuesday of each month.
Pres., Norman C. Fox, 512 Jenevein Ave., San Bruno.
Secy., Paul R. Freeman, 2946 Broadway, Redwood City.

Santa Barbara County Medical Society, 300 West Pueblo St., Santa Barbara. Meets Second Monday, Cottage Hospital.
Pres., Richard B. McGovney, 2950 State St., Santa Barbara.
Secy., Robert I. Cord, 300 W. Pueblo St., Santa Barbara.

Santa Clara County Medical Society, 1024 The Alameda, San Jose 26. Meets Third Monday of every month, except in July and August.
Pres., Dan Brodovsky, St. Claire Bldg., San Jose.
Secy., J. Frederic Snyder, 205 Medical Bldg., Campbell.

Santa Cruz County Medical Society. Meets every Second Month, Second Tuesday. Time, place to be announced.
Pres., Ludwig Selzer, 330 Soquel Ave., Santa Cruz.
Secy., Samuel B. Randall, 3 Clubhouse Rd., Pasatiempo, Santa Cruz.

Shasta County Medical Society. Meets First Monday.
Pres., Howard Wells, 1308 Court St., Redding.
Secy., Roland R. Jantzen, 1726 Market St., Redding.

Siskiyou County Medical Society. Meets Sunday on call.
Pres., Donald L. Meamber, 750 S. Main St., Yreka.
Secy., Roy F. Schlappi, 750 S. Main St., Yreka.

Solano County Medical Society. Meets Second Tuesday, 8:00 p.m., at different meeting places.
Pres., W. R. Hoops, 1727 Sonoma Blvd., Vallejo.
Secy., George J. Budd, 1004 Marin, Vallejo.

Sonoma County Medical Society, 300 American Trust Bldg., Santa Rosa. Meets second Thursday.
Pres., Andrew E. Thuesen, 304 American Trust Bldg., Santa Rosa.
Secy., Frank E. Lones, 304 American Trust Bldg., Santa Rosa.

Stanislaus County Medical Society. Meets Third Tuesday of the month, 7 p.m., Hotel Covell, Modesto.
Pres., E. E. Chouret, 168 S. Third Ave., Oakdale.
Secy., Robert W. Purvis, 709 18th St., Modesto.

Tehama County Medical Society. Meets at call of President.
Pres., Charles Milford, 737 Washington St., Red Bluff.
Secy., I. V. Cooper, 1122 Solano St., Corning.

Tulare County Medical Society.
Pres., Gordon L. Jackson, P. O. Box 177, Terra Bella.
Secy., C. H. Johnson, 795 N. Cherry, Tulare.

Ventura County Medical Society. Meets Second Tuesday, 7:15 p.m., Colonial House, Oxnard.
Pres., Richard Reynolds, 701 N. A St., Oxnard.
Secy., F. K. Helbling, 34 N. Ash St., Ventura.

Yolo County Medical Society. Meets First Wednesday.
Pres., Neil D. Elzey, Woodland Clinic, Woodland.
Secy., John H. Jones, 218 F St., Davis.

Yuba-Sutter-Colusa County Medical Society. Meets Second Tuesday.
Pres., James J. Hamilton, 1212 F St., Marysville.
Secy., Robert I. Hodgin, 729 D St., Marysville.

(For roster of C.M.A. committees and other organizations, see last month's issue.)

West German Medical Education Surveyed

Medical education in West Germany apparently is "moving forward rather brightly" under the present vigorous economy and "peaceful aims" of the country, according to a special report in a recent issue of the *Journal of the American Medical Association.*

Dr. J. Mather Pfeiffenberger, Alton, Ill., and Dr. DeWitt Hendee Smith, Princeton, N. J., said after a tour of German medical schools that teaching methods are changing and there is much construction of new buildings—some of which "would be envied by any medical school . . ."

The general robust economy and contacts between the medical world in Germany and other countries are two major reasons for the change.

American and British physicians in Germany with the armed forces have no doubt contributed to the briskness of contacts with medicine outside Germany, the authors said.

The foreign contacts' influence has helped the trend toward closer student-faculty relations, less authoritarian teaching methods, and more comparison between medicine in Germany and elsewhere, especially in the field of research.

The purpose of the tour was to assess the training of German medical students who later come to the United States for graduate work or to practice medicine.

"We got a fairly good idea of the sort of education a medical student might get if he wanted to but a less clear impression of whether he was assured of getting it," the doctors said.

They concluded that a good student may get an excellent training in Germany if he wants it, but a poor student may slip by the final state examinations with far less education than he could in this country.

One reason the poor student is allowed to get by with so little in Germany is the medical insurance system of the country, they said. Under this system the general practitioner is paid a very small amount. Therefore he cares only for simple things, sending patients to specialists for more complicated treatment. The mediocre German medical student with several years of hospital training may be competent to handle such simple problems as he must face.

However, the recognition of German medical training in the United States remains a vexing problem, they said. A possible solution might be to give credit to German training if accompanied by a high grade in state examinations.

They also found during their tour that:

Research and teaching laboratory facilities were in various states of repair and replacement. The new installations were built "with a sweep and a luxury that the best outside Germany may well envy. The German flare for architecture and design in the nontraditional styles plays a hand here."

(Continued on Page 14)

West German Medical Education Surveyed

(Continued from Page 10)

Equipment has been more quickly replaced than buildings and is in good supply, including both new German and foreign equipment.

Research of one sort or another was going on not only in the universities but in smaller or remote hospitals.

Where techniques or instruments were not German, there was quick acknowledgement of their sources. The general level of awareness of work going on outside Germany seemed to be high.

There is no attempt to limit the size of medical school classes, even in the face of an admitted surplus of doctors. The surplus, about 10,000 in a total of around 64,000, is mostly accounted for by the immigration from East Germany and would disappear if the partition were ended.

Physicians—
OUR ADVERTISERS
WILL APPRECIATE
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Principles of Medical Ethics Undergoing Revision

The Principles of Medical Ethics of the American Medical Association, which have served as a guide for physicians for more than a century, are undergoing radical surgery.

The American Medical Association House of Delegates, meeting in Chicago last month, approved a reference committee report on the revision. However, final action was deferred until the clinical session next November in Seattle, "to allow ample opportunity for thorough study" by American Medical Association members.

House action in Chicago followed a report by Dr. Louis A. Buie, Rochester, Minn., chairman of the council on constitution and by-laws, which said "there exists a broad twilight zone in which the concepts of ethics and etiquette are entangled and in which there is much overlapping and consequent confusion."

The report said the present principles are encumbered by confusing "verbosity and qualifying constructions." It was felt that the principles should be broad, providing a framework in which interpretations could be made. They should deal with basic principles which can serve as "a ready reference for the busy practitioner."

The report said: "It is important to understand that medical ethics are not distinct or separate from ethics generally, but simply emphasize those general principles which are of particular concern to the medical profession. The ethical physician will observe all ethical principles because he realizes that they cannot be enforced by penal reprisals, but must be binding in conscience."

The Principles as proposed consist of a brief preamble and ten sections which express the fundamental ethical ideas in the present Principles. Every basic principle has been preserved, but much of the wordiness and ambiguity which made ready explanation difficult have been eliminated. The change would cut the Principles from about 2,500 words to a total of about 400.

The proposed sections follow:

1. The prime objective of the medical profession is to render service to humanity with full respect for both the dignity of man and the rights of patients. Physicians must merit the confidence of those entrusted to their care, rendering to each a full measure of service and devotion.

2. Physicians should strive to improve medical knowledge and skill, and should make available the benefits of their professional attainments.

3. A physician should not base his practice on an exclusive dogma or a sectarian system, nor should he associate voluntarily with those who indulge in such practices.

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Principles of Medical Ethics Undergoing Revision

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4. The medical profession must be safeguarded against members deficient in moral character and professional competence. Physicians should observe all laws, uphold the dignity and honor of the profession and accept its self-imposed disciplines. They should expose, without hesitation, illegal or unethical conduct of fellow members of the profession.

5. Except in emergencies, a physician may choose whom he will serve. Having undertaken the care of the patient, the physician may not neglect him. Unless he has been discharged, he may discontinue his services only after having given adequate notice. He should not solicit patients.

6. A physician should not dispose of his services under terms or conditions which will interfere with or impair the free and complete exercise of his independent medical judgment and skill or cause deterioration of the quality of medical care.

7. In the practice of medicine a physician should limit the source of his professional income to medical services actually rendered by him to his patient.

8. A physician should seek consultation in doubtful or difficult cases, upon request or when it appears that the quality of medical service may be enhanced thereby.

9. Confidences entrusted to physicians or deficiencies observed in the disposition or character of patients, during the course of medical attendance, should not be revealed except as required by law or unless it becomes necessary in order to protect the health and welfare of the individual or the community.

10. The responsibilities of the physician extend not only to the individual but also to society and demand his cooperation and participation in activities which have as their objective the improvement of the health and welfare of the individual and the community.

Plan to attend the Third Annual California Rural Health Council, January 25 and 26, Hotel Senator, Sacramento. *Contact:* GLENN GILLETTE, Associate Director, Public Relations, California Medical Association, 450 Sutter Street, San Francisco 8.

Smoking Test May Reveal Coronary Disease

A laboratory test which measures the effect of cigaret smoking on the heart's pumping action was suggested recently as a possible way of finding otherwise unnoticed heart disease.

Capt. Murray Strober (M.C.), U.S.A.F.R., discussed the ballistocardiograph and Dock cigaret smoking test for diagnosing coronary artery disease in a recent issue of the *Journal of the American Medical Association.* The ballistocardiograph — which measures the impact on the body of the heart's thrust as it pumps blood—frequently indicates heart abnormalities even when other circulatory tests are negative.

Previous studies had shown that smoking before a ballistocardiogram produced nine times as many abnormal results among coronary disease patients as among normal persons.

Capt. Strober said his study, done at the Smoky Hill Air Force Base, Salina, Kansas, confirms the connection between smoking and abnormal ballistocardiograph results. He said there is no clear explanation for this, but there is a definite relation between ballistocardiograph abnormalities and coronary artery disease.

The vast majority of 2,736 airmen had normal tracings after smoking. However, abnormal tracings increased 30 times in persons between 30 and 60 years of age. Abnormal responses showed up in overweight individuals both before and after smoking, and regardless of age.

Not one ballistocardiogram showed any improvement after smoking. Prior to smoking there were 35 abnormal tracings among 2,265. After smoking 85 of 1,725 tracings were abnormal.

The ballistocardiogram has been of value in industrial medicine, he said. Some employers have made this a part of the routine study of employees or those entrusted with tasks where sudden illness might endanger many lives. Part of the reason for the Air Force study was to see if the test could detect asymptomatic coronary disease in persons engaged in the hazardous duties of flying at enormous speeds in high altitudes.

The addition of the Dock cigaret smoking test may make screening surveys more accurate, Capt. Strober said. It is unlikely that the test will detect all cases of asymptomatic coronary disease, but it may find cases that are not detectable by other available means. The ballistocardiogram is not intended to replace a careful physical history, complete physical examination or established methods of cardiac study, he said. Instead the test, which is rapid, efficient and economical, is intended to give the physician additional information about the mechanical pumping action of the heart.

Capt. Strober said that a long-term follow-up study will deal with the men who had abnormal

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Job Probation Motivates Alcoholics to Seek Help

A combination of job probation and outside psychiatric help has in the last three years helped one group of alcoholics overcome their drinking problem while remaining on the job.

A report on the Consultation Clinic for Alcoholism, established in 1952 in New York by 14 industrial organizations to help their alcoholic workers, appears in a recent issue of the *Journal of the American Medical Association.*

In its three years of operation the clinic has helped 82 per cent of the 148 alcoholics who accepted treatment remain on the job. In comparison, only half of those who refused treatment kept their jobs. In addition, work absences among the patients dropped by two-thirds after treatment was begun.

Workers are referred to the clinic by their company medical departments, usually after being placed on job probation and told they will lose their jobs if they do not stop drinking.

The probation serves as a strong motivation to seek treatment, the authors said. Motivation is difficult to establish because most of these men have not yet reached the "terminal stage" of alcoholism where they recognize that their jobs and other phases of their lives are seriously disrupted by their drinking.

The threat of job loss was especially great to most of the patients referred to the clinic because they were in the 44-to-63-year age bracket and had held their jobs for many years. The age bracket may be accounted for by the fact that it usually takes 10 to 15 years of drinking before the nature and extent of alcoholism is sufficient to interfere seriously with family, social and vocational life, they said.

Success or failure in treatment depends on motivation and it is "unquestionably" the job probation which turns the balance in favor of seeking treatment, they said.

"Historically, this firm attitude represents a midpoint between the two earlier positions taken toward alcoholics," the authors said. "Initially the attitude was one of harsh, relentless condemnation of the alcoholic as a morally weak person lacking in personal worth and consideration for others, with discharge from his job as the usual consequence. Then the pendulum swung to the other extreme where the alcoholic was regarded as the unfortunate victim of social and psychological pressures against which he was helpless to struggle or change, with repeated episodes of empty promises and drinking relapses as a consequence."

The attitude embodied in the probation procedure recognizes the need for help, but also makes the employee aware that he plays an important part in the rehabilitation process, they said.

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Job Probation Motivates Alcoholics to Seek Help

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The clinic at the University Hospital of the New York University-Bellevue Medical Center is completely independent of its sponsoring organizations. It is staffed by psychiatrists, psychologists and an internist. Treatment consists mainly of individual psychotherapy, group psychotherapy, treatment with drugs such as disulfiram (Antabuse), medical procedures, and in some cases referral to Alcoholics Anonymous. Of the 180 patients referred to the clinic since it opened, 148 have undertaken treatment. Only one patient, with a chronic type of schizophrenia, was considered to be untreatable at the clinic; one patient was hospitalized and then briefly.

Authors of the report were Arnold Z. Pfeffer, M.D., Daniel J. Feldman, M.D., Charlotte Feibel, John A. Frank, M.D., Marilyn Cohen, B.A., Stanley Berger, Ph.D., M. Freile Fleetwood, M.D.

Smoking Test May Reveal Coronary Disease

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tracings before smoking and those who responded to smoking. Perhaps in those men who later have acute heart disorders characteristic patterns may be found by reviewing their survey records, he said.

Dr. Strober is now at the State University of New York College of Medicine at New York City.

Research Continues for Whipworm Treatment

A drug which has been highly successful in curing whipworm infections in dogs has been tried in humans and found wanting.

However, it is hoped further research will reveal ways the drug can be used against whipworm in man, since no other satisfactory treatment has yet been found, Dr. Mark T. Hoekenga, Puerto Armuelles, Panama, said in a recent issue of the *Journal of the American Medical Association.*

He said the intestinal parasite's potential damage to adults has been underestimated, although it has been agreed that "an overwhelming infection" in an infant may produce diarrhea, intestinal obstruction or emaciation. Milder adult infections may also produce diarrhea. The parasite is a two-inch long, hair-like worm.

Dr. Hoekenga used Whipcide (trade name) to treat 143 Honduran workers infected with whipworm (Trichuris trichiura). Whipcide is a synthetic composed of alcohol and several uncommon chemicals. It is related to a relatively new nonhabit

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Two Researchers Outline "Phantom Limb" Theories

Nearly every person who loses an arm or leg experiences the same unusual sensation—that the lost limb is still there.

Scientists, who call this the "phantom limb" phenomenon, have been trying to explain it for a century.

One reason they want to understand phantom limbs is fairly obvious: If they know the cause they may be able to help those who suffer severe pain from them.

But one researcher has an even broader reason; she says she knows of "no other set of facts" that offers so many possibilities for revealing things about why normal bodies feel certain ways. An explanation of phantom limbs, she says, may throw light on the way the body learns to move and develop, on the influence of certain social factors on the body, and on the emotional problems involved in various bodily actions.

She and another researcher gave their theories on the cause of phantom limbs in articles in a recent issue of *Archives of Neurology and Psychiatry*, published by the American Medical Association. The researchers are William B. Haber, New York, and Marianne Simmel, Ph.D., Chicago.

They said the phenomenon has often been thought to be caused by sensations aroused in the stump nerve endings, but they believe something more is involved.

Haber said the phenomenon originates in the central nervous system, which includes the brain and spinal cord. This could be due to either of two things: From birth the central nervous system "expects" certain feelings from the parts of the body, or else it learns to have sensations from the parts of the body and remembers these feelings even after a part is lost.

The similarity of phantom limb sensations in 24 World War II veterans who each lost an arm supports his theory, he said, because it rules out the possibility that phantoms result from unusual conditions in the stump or special conditions before or after amputation. However, there is insufficient evidence now as to whether the phantom sensations depend more on learned or unlearned factors.

Miss Simmel suggested that the phantoms are products of a "time delay" in the body's learning process. Since the brain is "in the habit" of feeling sensations from nerves in the limb, there may be a lag before it learns not to feel them. This could explain why phantoms are common when the limb is lost suddenly, but rare when the loss is gradual as in the absorption process of leprosy. Lepers who have lost parts of limbs, fingers or noses by this absorption feel no phantom. But when leprosy-

damaged parts are removed by surgery, the phantoms appear just as they do among other amputees.

Haber said that all 24 men he studies reported the phantom sensation, with only one calling it painful. Most described the feeling as a mild tingling ("pins and needles," "as if asleep," "vibrating"). The majority felt their phantom now and then; only two felt it constantly and one seldom. Itching was reported by seven men, who felt it strongly enough to scratch nonexisting palms. Throbbing, pulsating, warmth, tenseness, clenching, clutching, gripping and numbness were also reported.

All but two said their phantom had "shrunk" over the years, with some saying the phantom hand had either completely entered the stump or was partly fused with it, so that only portions of the hand were felt to be "protruding." This condition is called telescoping. Following amputation a fading or dropping out of certain parts of the phantom, usually the elbow, forearm or wrist, occurs. The parts which have the greatest use and the most nerves—the fingers, thumb and palm—usually are felt for the longest time.

As the parts drop out, the phantom feels disconnected from the rest of the body, "a disturbing state of affairs," according to Miss Simmel. In order to bridge the gap telescoping occurs, with the phantom part moving toward the stump.

Some men told of illusory movement of the phantom, usually an impulsive reaching toward a falling object. Some also had the feeling of penetrating solid matter. This occurred when solid objects occupied the space which would have been occupied by the limb had it not been lost. Then the phantom limb was felt to be occupying the same space as the solid object. Some also felt imprints of watches or rings worn on the limb before its loss.

Haber found no relation between the characteristics of the phantom and the conditions at the time of loss—either in position of the phantom or in the amount of pain. Neither was there any relation between the wearing of an artificial limb and the dimensions, quality or vividness of the phantom sensations.

Haber concluded that the uniformity of sensations among the men supports, but does not prove, the theory that the phantoms originate in the central nervous system. Studies on the presence or absence of phantoms in children who had amputations at a very early age or were born without a limb, might help determine the role played by learning in causing phantoms, he said.

Haber is from the psychophysiological laboratory of New York University-Bellevue Medical Center. Miss Simmel is from the Illinois State Psychopathic Institute and College of Medicine, University of Illinois.

Research Continues for Whipworm Treatment

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forming sedative called methylparafynol (Dormison).

When doses large enough to cure were given, severe complications of the eye, nausea, buzzing in the ear and deafness occurred. Of 107 patients receiving a single dose, varying in amount from 100 to 200 mg. per kilogram of body weight, about half were cured. But serious eye complications, including inflammation, pain and light sensitivity, occurred in 16 per cent. Of 36 patients receiving smaller doses, only 22 per cent were apparently cured. Fortunately all the complications cleared within eight days, Dr. Hoekenga said.

A 50 per cent cure rate would be encouraging if there were no adverse side effects, he said. The severity of the complications prevents the widespread use of the drug among humans. He noted that no eye or ear reactions occurred in any of the hundreds of dogs receiving doses of 250 to 500 mg. However, dogs did become drowsy when given 500 mg. This suggested that the first sign of a toxic reaction in humans would have been drowsiness, but no such drowsiness occurred. These differences in toxicity may be due to breakdown products, with different products occurring in men and dogs, he said.

"Since Whipcide seems so eminently satisfactory in the treatment of dog whipworm diseases, one is reluctant to discard it completely from human trials before exploring all avenues," he said, adding that it may be of value in making heavy infections lighter through repeated small doses.

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Physicians Prefer Exclusiveness At American Medical Association Exhibits

A survey just completed by American Medical Association Business Manager Thomas R. Gardiner shows that both exhibitors and physicians favor the new plan of limiting attendance at the American Medical Association technical and scientific exhibits to physicians only during certain periods.

The plan was first tried at the Atlantic City meeting in 1955. Attendance one forenoon was limited to physicians only. At the recent Chicago meeting two forenoons were limited to doctors only. Since then, a number of exhibitors have said that they would prefer to have two full days set aside for doctors only. Others have reported that this is the best single improvement in convention attendance initiated in many years, and hope the plan continues.

Exhibitors say the physicians-only idea gives them a better chance to talk with doctors and also they find that doctors are in a more receptive mood for business conversation.

Mr. Gardiner said that since the Chicago meeting he polled the technical exhibitors, and here are a few of the typical comments:

"We wish to compliment you on your idea to limit two mornings during the week of the American Medical Association show to M.D.'s only. We trust there will be more practices like this in the future."

Another exibitor from New York said: "Your plan to restrict attendance to physicians only was extremely satisfactory . . . and possibly two complete days could be given over to physicians only. All concerned would benefit from such a plan."

Said a Kansas City exhibitor: "The physicians-only restriction is a big improvement. . . . It is an extremely difficult thing when one is displaying prescription legend items to have all sorts of people stop by requesting a few samples."

An Ohio manufacturer said: "Our comments on your plan are entirely favorable. I was present one of these mornings and felt it very definitely took the carnival atmosphere away for a long enough time to interview physicians on a very high plane."

A Florida orange juice exhibitor said: "I would like to go on record as being in favor of this restriction, and hope that this will continue to be a policy of future American Medical Association meetings."

—A.M.A. Secretary's Letter

Research Continues for Whipworm Treatment

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[Editor's note: Whipworm infection appears to be a growing problem in the U. S., according to a report given during the A.M.A.'s 105th annual meeting in Chicago. Whipworm has been introduced into the Chicago area only during the last ten years. Infection may spread because the worm has a long life expectancy (20 to 30 years with the worms often outliving the host), requires no host other than man, and enters the body through the mouth. Whipworms and their eggs will be present in the newly invaded areas for years to come unless the patients are treated and treatment is difficult. Treatment has consisted of saline purgatives followed by high tepid water enemas and then the drugs santonin or tetrachlorethylene in weekly doses.]

Physicians

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Systemic Manifestations of Erythema Nodosum

CUTTING B. FAVOUR, M.D., Palo Alto

• **The systemic manifestations accompanying erythema nodosum can be differentiated from those associated with the precipitating infectious process and from coincident disease processes.**

Erythema nodosum itself is characterized by (a) skin lesions at pressure sites, (b) malaise, fever and occasionally chills, (c) arthritis (70 per cent) and (d) over-reactivity of tissue. Tissue hypersensitivity is most pronounced at sites of trauma, at sites of specific skin testing, and in the lymphoid system draining infections in the pharynx and lung.

Common infections of the respiratory tract most often antedate attacks of erythema nodosum. In New England, a β-hemolytic streptococcus infection is a common causative factor, and tuberculosis is an unusual causative factor. In endemic areas, coccidioidomycosis is a common cause of erythema nodosum.

The most important coincidental disease process is rheumatic heart disease. Rarely is it a sequel of erythema nodosum. Other "collagen diseases" may coexist with erythema nodosum.

Erythema nodosum is its own most common complication. Follow-up studies indicate that over half of the patients have a subsequent attack, and a certain number have recurrent episodes for months to years.

The management of erythema nodosum is expectant. In each case the cause should be found and treated. Steroid treatment is rarely justified, and should be used only after tuberculosis and other treatable entities have been ruled out.

THE COMMON benign form of erythema nodosum is characterized by tender, bruise-like lesions on the shins of a patient who is ambulatory. Much of the knowledge of erythema nodosum, however, has come from studies on the more severe and less frequent variety of this disease which is marked by systemic symptoms and a protracted course. The purpose of this presentation, which is based on observation and review of the records of 163 patients with the disease, is to differentiate the clinical manifestations of erythema nodosum itself from those arising from coincident or causative underlying processes.

The clinical material used in this study was seen in the medical clinics of the Peter Bent Brigham Hospital, Boston, Massachusetts, and in the author's practice in Boston and in Palo Alto, California.

Department of Immunology, Palo Alto Medical Research Foundation, Department of Internal Medicine, Palo Alto Clinic, Palo Alto, and the Stanford University School of Medicine, San Francisco 15.

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Presented before the Section on General Medicine at the 85th Annual Session of the California Medical Association, Los Angeles, April 29 to May 2, 1956.

DIAGNOSIS OF ERYTHEMA NODOSUM

The more severe type of erythema nodosum[5] is a systemic disorder accompanied by tender, sometimes spontaneously painful, indurated lesions of the skin and subcutaneous tissues. The diagnosis cannot be made from its systemic symptoms, however, without the presence of these lesions somewhere on the cutaneous surfaces of the body. Usually, bilateral lesions resembling bruises are found on the shins.

California MEDICINE

For information on preparation of manuscript, see advertising page 2

EDITORIAL

Medicare

MEDICARE, a new word in the medical lexicon, is the coined term to describe the new program of the Department of Defense for providing medical and hospital care for the dependents of military personnel. While such care has traditionally been provided by the armed forces since 1818, various obstacles such as lack of clear legal responsibility and authorization, location of many dependents at a distance from military hospitals and other factors have operated to prevent a complete and suitable program for those who might be considered eligible for benefits.

The Congress earlier this year adopted, and the President signed, Public Law 569, which provides that such care will be given to military dependents, either through federal establishments or through private sources.

Under the terms of this law, many California physicians may soon find themselves with patients who otherwise might have gone to military hospitals or have foregone needed care.

Our peacetime military establishment totals about 3,000,000 men, who are estimated to have about 2,000,000 dependents. The latter figure is strictly an estimate and may run considerably higher when and if an accurate tabulation is made.

Government sources estimate that about 40 per cent of the dependents, or about 800,000 persons, are not able today to obtain medical care because military hospitals are not available. Under the new law, it is hoped to make medical and hospital benefits to these dependents uniform throughout the land, regardless of whether military or civilian facilities are used.

Further estimates show that with few exceptions our military men have incomes of less than $7,000 annually, and that 63 per cent have annual incomes, including base pay and maximum allowances, of less than $3,300 annually. If this number is included with the next higher income bracket, an estimated 82 per cent of all military personnel receive less than $4,300 a year.

From these figures it is readily seen that the military dependents fall within or close to the income brackets normally used in service-type voluntary health insurance programs such as California Physicians' Service.

Under the Medicare program, military dependents will receive virtually complete medical, surgical and hospital coverage. Included in the program will be complete obstetrical and maternity care, hospitalization up to 365 days for each admission, treatment for medical and surgical conditions, treatment for contagious diseases and medical-surgical care for accident cases.

This entire program will be administered by the Department of Defense, which has taken a realistic attitude from the very start on the matter of dealing with private physicians and private hospitals. Spokesmen for the Defense Department have made it clear in their meetings with physicians and hospital representatives that they want to utilize private facilities in a normal manner, that they want the military dependents to have free choice and that they expect to pay reasonable fees for the private care provided.

This is a rather far cry from earlier experiences with the Veterans Administration, where the California "home-town" medical care program has had to overcome numerous obstacles apparently placed in the way of C.P.S., as the administrative agency, by governmental employees who would prefer to see the plan handled by the VA itself. In California it was long ago decided that C.P.S. was the physicians' own organization and the one body which could be counted upon to handle the VA program with the physicians' interest in mind.

Under the Department of Defense plans for Medi-

California MEDICAL ASSOCIATION

NOTICES & REPORTS

Care of the Patient With Advanced Cancer

INTRODUCTION

THE CANCER COMMISSION of the California Medical Association has prepared this article on the care of the patient with advanced cancer, to help the attending physician to meet his responsibilities by bringing together in this article the various methods which are of assistance in such situations. It is realized that much that will be said is not new; and that *all* methods may not have been included; it is hoped, however, that the material present will act as a stimulus and point out avenues of approach in the handling of these patients.

THE ATTENDING PHYSICIAN'S RESPONSIBILITY

The physician who undertakes definitive treatment of cancer in any patient immediately assumes certain definite obligations to his patient. First, after completion of the initial treatment he should have his patient return to his office for periodic examination and observation, to be certain that there has been no return or spread of the cancer he has treated. Secondly, he should be prepared to institute prompt treatment if the cancer does recur. Finally, he should be willing to accept the heartbreaking chore of the care of this patient in the event that far spread metastasis develops.

In the actual care of the patient with advanced cancer there are certain basic responsibilities:

1. *The maintenance of morale in the patient and family.*

To do this adequately and properly the physician should practice a form of psychotherapy. Or, as it might be expressed, this portion of the patient's care is based on the art rather than the science of medicine.

Avoid at all costs giving the patient the idea that nothing further can be done to check the course of his disease. Always hold out, in some manner, a hope to which the patient can cling that something of value can be done. Such assurance may aid in making his terminal illness a meaningful and bearable experience instead of one of terror and abandonment.

Do not limit his activity; keep him a productive member of his family and society for as long as possible. Let the patient be as active as he desires and actively encourage him to continue his normal pursuits as much as he can.

Never hesitate to suggest the possibility of consultation. This will strengthen the patient's belief and the family's belief that you are doing everything possible to help him. It will give him, and you also, the opportunity to discuss with other competent individuals the problem with which all of you are faced.

Never, under any condition, abandon the patient. It is not the fear of death, but of dying, which is almost universal; if to this is added a sense of being abandoned, the patient may become terror stricken.

2. *Make the prognosis clear to some responsible member of the family.*

Be sure that the whole problem is discussed and that all of the various avenues of care are outlined.

Mechanization Blamed for Farm Accident Increase

When the farmer stopped having to rest his horses periodically, he also stopped resting himself. This failure to observe rest periods and the accompanying fatigue was blamed for many farm accidents.

Dr. Franklin H. Top, Iowa City, pointed out that deaths from farm accidents in 1954 totaled 14,000, a rate of 61.7 deaths per 100,000 farm residents. Motor vehicle accidents were responsible for the greatest share, followed by "work" accidents, including accidents from farm machinery. Among major industries farming ranks third in the number of accidental deaths per 100,000 workers, he said in a recent issue of the *Journal of the American Medical Association.*

Dr. Top said the high level of work accidents on the farm is partially due to the shift from horse-drawn to motor-driven machinery.

"Horses had to be rested periodically, and with this came rest for the driver. Furthermore, the same horses could not be worked 10 to 15 hours a day for several days," he said, adding that it is not unusual for a farmer to spend more than 10 hours a day in the field with a tractor, especially if he gets a late start because of weather or soil conditions.

Studies have shown that there is a peak mid-morning and midafternoon period during which the majority of accidents occur. Thus a midmorning break, like that given in most factories, is a good idea for the farmer, Dr. Top said.

Carelessness in the handling of machinery and poor safety design also have contributed to farm accidents. Only in recent years have manufacturers been interested in safety of farm machinery, but the safety devices now provided are not always appreciated by the farmer. In many instances, accidents have been attributed to the farmer's removal of safeguards on machinery.

Tractor accidents account for 700 deaths a year, Dr. Top said. One thinks of a tractor as used principally on the land, but many of the deaths related to tractors do not occur in actual farm work. In recent Minnesota and Iowa studies, approximately one-third of the tractor fatalities occurred in highway accidents.

Surprisingly, a fair proportion of the deaths do not occur among operators of the machine, he said. Wisconsin and Ohio studies over a year indicated that roughly 11 per cent of the victims were children under five years of age and an additional 5 per cent were between the ages of five and nine years.

Much work has been done to inform agricultural workers of the hazards of farm machinery, but as with the automobile, the advice must be heeded, Dr. Top said. The agricultural worker must realize that accidents can happen to him.

Physician Gives Advice on Childhood Convulsions

Convulsions in children are alarming, but when they occur the best thing to do is to "keep your head" and call your doctor, a Milwaukee pediatrician said recently.

It is essential to protect the child from injuring himself and others, but care must be taken not to injure him in the process.

"Many more children have been injured by well-meaning parents or helpers than have injured themselves in a convulsion," Dr. M. G. Peterman said, adding that he had seen more children burned than helped by being immersed in hot water.

When the doctor arrives and starts asking questions instead of treating the child, don't be alarmed, he said. The convulsion will probably be over by then, but the underlying cause of the convulsion must be found. A convulsion is a symptom, not a disease, and treatment must be aimed at the cause.

For many years convulsions were considered as "a necessary evil of childhood," Dr. Peterman said in a recent issue of *Today's Health*, published by the American Medical Association. They were attributed to a delay in the development of the central nervous system, delayed eruption of teeth, worms, and overindulgence in certain foods.

A 25-year study of more than 3,000 children produced a new concept of convulsions, he said. A convulsion indicates an acute disturbance, irritation, infection or temporary upset of the brain. The study showed that certain diseases which are more prominent during certain periods of childhood accounted for many of the convulsions. For instance, in the first month of life, the most common cause was disturbance of the brain during or shortly after birth.

In the early months of life the most common causes are acute infection including contagious diseases, infantile tetany or disturbance of calcium metabolism, and brain injury at birth. As age increases epilepsy is added to the list. Nearly half of all convulsions make their first appearance when the child is from six to 36 months old, he said. Although serious, convulsions appear in only about one per cent of sick children.

A child may recover from a convulsion and never have another. Yet the questions of the cause, whether he will have another and what can be done to prevent it remain. The family doctor, who is familiar with the child's history and problems, is the best person to answer these questions, he said. If the parent can give him an accurate and complete history and an intelligent description of the events before and during the convulsion, the doctor will probably reach a diagnosis of the cause. If he cannot, he will refer the child to a specialist in convulsive disorders, Dr. Peterman said.

Auto Passengers Advised To Protect Themselves

It's better to lose a friend than to lose your life, a health and safety consultant recently stated.

Dr. Carl J. Potthoff, in his safety and first aid column in *Today's Health*, published by the American Medical Association, said people should not take risks with an irresponsible automobile driver, even if it means offending him.

"Although statistics from nationwide experience are not available, it is possible that half or more of nonpedestrian traffic accidents that result in death or permanent injury happen to people whose only error lay in accompanying others who did the driving," he said. "Some of these drivers pay little attention to their responsibility for passengers.

"Sometimes we do not like to reject rides with such drivers; we do not like to remonstrate with the speeder; we do not like to request that a reckless driver stop so that we can leave the car.

"We hesitate to offend him, but he is entirely willing to jeopardize our life.

"Consider the passengers who are driving to or from a fishing or vacation resort, the teen-age girl who is bound to or from a dance, the group that is going to or from a sports event, a convention, a gala meeting. If you study newspaper accident accounts, you will quickly note that it is the passengers who

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Auto Passengers Advised To Protect Themselves

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often pay the price for the careless driving of others."

Dr. Potthoff said parents and safety educators should teach children how to deal with irresponsible drivers, how to protect themselves when there are "social pressures" toward accepting dangers.

If properly prepared, they will have through life a "base line" for dealing with these situations, he said, explaining: "The base line is that self-protection is more important than the esteem of the irresponsible."

When other approaches fail, he concluded, "forthright action for self-protection should be taken."

Skin Tests Recommended for Allergic Infants

Children under two years of age are not too young to undergo skin tests for allergy. In fact, the sooner procedures for diagnosing the cause of allergy are begun the better, three physicians said recently.

If the cause of the allergy is found early and treated—especially within the first five years of life—much can be done "to forestall or shorten the inroads of allergy in later years," they said in a recent issue of the *Journal of Diseases of Children*, published by the American Medical Association.

Drs. Bret Ratner, New York; Lloyd V. Crawford, Memphis; and John G. Flynn, Salem, Massachusetts, studied 27 children under two years of age and 37 children who ranged in age from two to five years. They suffered from asthma, eczema, hay fever or hives.

The study showed that the majority of children reacted to more than one food, pollen or inhalant. In view of this, the authors said, "it is foolhardy to treat a young infant for only one or another obvious factor." To achieve effective results, all of the child's sensitivities must be considered in planning treatment.

Certain groups of foods, such as fish, eggs and cereal grains, produced reactions very frequently. Milk and citrus foods also produced reaction. Chocolate, which has always been regarded as a frequent offender, produced reactions in only 11 per cent of the children. Milk sensitivity was only found in conjunction with other sensitivities.

The early age of onset of allergy in these cases did not appear to be influenced by heredity, they said. However, sensitization before birth, by the passage of undigested food antigens from mother to child, may explain the "explosive allergic" reaction that occurs in certain infants eating a food for the first time or coming in contact with persons who have handled or eaten the offending food.

There was a high rate of eczema among the children during the first year of life, with asthma and hay fever appearing as age increased. During the first five years they noted a gradual decrease in food sensitivity, a marked rise in pollen sensitivity, a consistently high rate of sensitivity to dust, feathers, cotton and other inhalants, and a moderate rate of sensitivity to molds.

The authors are from the pediatric and pediatric allergy departments of New York Medical College and Flower and Fifth Avenue Hospitals, New York.

Plan to attend California Rural Health Council—Sacramento (Hotel Senator) January 25-26, 1957.

Old Age Does Not Prevent Gallbladder Surgery

Old age alone does not necessarily prevent early surgical removal of gallstones which may become malignant, a Washington, D. C., surgeon said recently.

The risk of gallbladder surgery is about the same for persons over 60 as for those under 60, provided there are no other complications, Dr. Alec Horwitz said in a recent issue of the *Journal of the American Medical Association.* Of 300 consecutive gallbladder operations he performed, 67 were on persons over 60. There were no deaths, even among those with complications.

However, it is wise to eradicate gallbladder disease before old age overtakes the patient and before other diseases and complications occur, even when the gallstones produce no symptoms, Dr. Horwitz said, adding that he doubted if there is such a thing as a "silent" gallstone. Gallbladders with gallstones should be removed before they become "vocal," for when they begin to "shriek with malignant changes" it is often too late, he said.

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Old Age Does Not Prevent Gallbladder Surgery

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There is a very great increase in the incidence of cholecystitis, common duct obstruction and cancer of the gallbladder in persons over 60. Delay in surgery must be avoided because the aged person deteriorates rapidly, he said. In acute cholecystitis remedial surgery should be done as soon as the diagnosis is established and the patient is ready for it.

In the urgent case quick treatment, gentle and rapid but unhurried surgery, smoothly efficient operating-room teamwork, and skillful anesthesia will be repaid by fewer deaths or serious illness. In fact, among his 67 aged patients undergoing and surviving surgery, 52 had associated diseases, including hypertension, coronary disease, diabetes mellitus, obesity, bleeding peptic ulcer and stomach cancer, and 23 had acute or chronic cholecystitis.

Dr. Horwitz is associate clinical professor of surgery at George Washington University School of Medicine.

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ATLAS OF ANATOMY, AN—Fourth Edition—J. C. Boileau Grant, M.C., M.B., Ch.B., F.R.C.S. (Edin.), Professor of Anatomy in the University of Toronto. The Williams and Wilkins Company, Baltimore, 1956. 634 figures, $15.00.

CANCER OF THE LUNG: An Evaluation of the Problem—Proceedings of the Scientific Session, Annual Meeting, November 3-4, 1953. American Cancer Society, Inc. 527 West 57th Street, New York 19, N. Y., 1956. 322 pages.

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CLINICAL UROLOGY FOR GENERAL PRACTICE—Justin J. Cordonnier, M.D., F.A.C.S., Professor of Urology, Washington University School of Medicine, St. Louis. The C. V. Mosby Company, St. Louis, 1956. 252 pages, $6.75.

DERMATOLOGY—Donald M. Pillsbury, M.A., D.Sc. (Hon.), M.D., Professor and Director, Department of Dermatology; Walter B. Shelley, M.D., Ph.D., Associate Professor of Dermatology; and Albert M. Kligman, M.D., Ph.D., Associate Professor of Dermatology, all from the University of Pennsylvania School of Medicine. W. B. Saunders Company, Philadelphia, 1956. 1331 pages, 564 figures, $20.00.

ESSENTIAL UROLOGY—Third Edition—Fletcher H. Colby, M.D., Consultant, Massachusetts General Hospital; formerly Associate Clinical Professor of Genitourinary Surgery, Harvard Medical School. The Williams and Wilkins Company, Baltimore, 1956. 656 pages, $8.00.

HUMAN GENERATION—Conclusions of Burdach, Dollinger and von Baer—Arthur William Meyer, Professor Emeritus of Anatomy, Stanford University. Stanford University Press, Stanford, 1956. 143 pages, $3.50.

INTERNAL MEDICINE—A Physiological and Clinical Approach to Disease—Robert P. McCombs, B.S., M.D., F.A.C.P., Professor of Graduate Medicine, Tufts University School of Medicine. The Year Book Publishers, Inc., Chicago, 1956. 706 pages, $10.00.

INTERNAL SECRETIONS OF THE PANCREAS—Ciba Foundation Colloquia on Endocrinology—G. E. W. Wolstenholme, O.B.E., M.A., M.B., B.Ch., Editor and Cecilia M. O'Connor, B.Sci. Little, Brown and Company, Boston, 1956. 292 pages, 100 illustrations, $7.00.

J.A.M.A. CLINICAL ABSTRACTS OF DIAGNOSIS AND TREATMENT—Published with the approval of the Board of Trustees, American Medical Association—Intercontinental Medical Book Corporation, with Grune & Stratton, Inc., New York, 1956. 661 pages, $5.50.

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LABYRINTH, THE—Physiology and Functional Tests—Joseph J. Fischer, M.D., Clinical Professor in Otolaryngology, School of Medicine, Tufts University. Grune and Stratton, New York, 1956. 206 pages, $6.00.

LECTURES ON THE SCIENTIFIC BASIS OF MEDICINE—Volume IV, 1954-56. British Postgraduate Medical Federation, University of London. The Athlone Press, 1956. Distributed in U.S.A. by John de Graff, Inc., 31 East 10th Street, New York 3, N. Y. 397 pages, $6.50.

MANUAL OF THE COMMON CONTAGIOUS DISEASES, A—Fifth Edition, Thoroughly Revised—Philip Moen Stimson, A.B., M.D., Professor of Clinical Pediatrics, Cornell University Medical College; and Horace Louis Hodes, A.B., M.D., Clinical Professor of Pediatrics, Columbia University College of Physicians and Surgeons. Lea & Febiger, Philadelphia, 1956. 624 pages, 84 illustrations and 10 plates, 8 in color, $8.50.

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BOOKS RECEIVED

(Continued from Page 93)

NEW BASES OF ELECTROCARDIOGRAPHY—Demetrio Sodi-Pallares, M.D., Chief of the Department of Electrocardiography at the National Institute of Cardiology of Mexico, Professor of Cardiovascular Clinics, National University of Mexico; with the collaboration of Royall M. Calder, M.D., Editor, English Translation, Clinical Professor of Medicine, Baylor University. The C. V. Mosby Company, St. Louis, 1956. 727 pages, 520 illustrations, $18.50.

OBSERVATIONS ON KREBIOZEN IN THE MANAGEMENT OF CANCER—A. C. Ivy, Ph.D., M.D., Professor of Physiology and Head of the Department of Clinical Science, University of Illinois; John F. Pick, S.B., M.M., M.D., Head of Department of Plastic Surgery, Columbus Hospital, Chicago; and W. F. P. Phillips, M.D., Department of General Practice, St. Francis Hospital, Evanston. Henry Regnery Company, Chicago, 1956. 88 pages, $2.50.

OCCUPATIONAL HEALTH NURSING—Mary Louise Brown, R.N., M.A., Assistant Professor of Public Health, Yale University School of Medicine; in association with John Wister Meigs, M.D., Associate Professor of Public Health, Yale University School of Medicine. Springer Publishing Company, Inc., 44 East 23rd Street, New York 10, N. Y., 1956. 276 pages, $4.50.

PATHOLOGY AND SURGERY OF THE VEINS OF THE LOWER LIMB, THE—Harold Dodd, Ch.M. (L'pool), F.R.C.S. (Eng.) Surgeon to St. Mary's Hospital (London) Group; and Frank B. Cockett, M.S. (Lond.), F.R.C.S. (Eng.), Surgeon to St. Thomas's Hospital, London. E. & S. Livingstone Ltd., Edinburgh and London, 1956. Distributed in U.S.A. by Williams and Wilkins Company, Baltimore, 1956. 462 pages, $12.50.

PULMONARY EMPHYSEMA—Edited by Alvan L. Barach, M.D., Clinical Professor of Medicine, and Hylan A. Bickerman, M.D., Assistant Clinical Professor of Medicine, both of Columbia University College of Physicians and Surgeons. The Williams and Wilkins Company, Baltimore, 1956. 545 pages, $10.00.

ROENTGEN SIGNS IN CLINICAL DIAGNOSIS—Isadore Meschan, M.A., M.D., Professor and Director of the Department of Radiology at Bowman Gray School of Medicine, Wake Forest College. With the assistance of R. M. F. Farrer-Meschan, M.B., B.S. W. B. Saunders Company, Philadelphia, 1956. 1,058 pages, 2,216 illustrations on 780 figures, $20.00.

SLEEP—Marie Carmichael Stopes, Doctor of Science, London. Philosophical Library, New York, 1956. 154 pages, $3.00.

STUDIES IN TOPECTOMY—Edited by Nolan D. C. Lewis, M. D., Carney Landis, Ph.D., D.Sc., and H. E. King, Ph.D. Grune and Stratton, New York, 1956. 248 pages, $6.75.

SURGERY FOR GENERAL PRACTICE—Victor Richards, M.D., Professor of Surgery, Chairman of the Department of Surgery, Stanford University School of Medicine. The C. V. Mosby Company, St. Louis, 1956. 947 pages, $17.50.

TEXTBOOK OF GYNECOLOGY—Fifth Edition—Emil Novak, A.B., M.D., D.Sc. (Hon.), F.A.C.S., F.R.C.O.G. (Hon.), Assistant Professor Emeritus of Gynecology, The Johns Hopkins Medical School; and Edmund R. Novak, A.B., M.D., F.A.C.S., Instructor in Gynecology, The Johns Hopkins Medical School. The Williams and Wilkins Company, Baltimore, 1956. 840 pages, $11.00.

VENOUS RETURN—Gerhard A. Brechier, M.D., Ph.D., Julius F. Stone, Professor Physiology, Department of Physiology, College of Medicine, The Ohio State University, Columbus, Ohio. Grune and Stratton, New York, 1956. 148 pages, $6.75.

WILLIAMS OBSTETRICS—Eleventh Edition—Nicholson J. Eastman, Professor of Obstetrics, Johns Hopkins University. Appleton-Century-Crofts, Inc., New York, 1956. 1,212 pages, $14.00.

U. S. Rules Refresher Courses Are: "Deductible, If . . ."

U. S. Internal Revenue Service now states that your expenditures for education are deductible if they are for a "refresher" or similar type course taken to maintain the skills directly and immediately required by you in your employment or business. To be covered, an educational course should: be designated for established physicians to help them keep abreast of current developments in the profession; be of short duration; but should not be taken on a continuing basis nor carry academic credit. Not acceptable: education designed to prepare the doctor to enter a specialty.

If you travel away from home primarily to obtain "refresher" education, your expenditures for travel, meals and lodgings while away from home are deductible. Not allowable: expenses for personal activities such as sightseeing, social visiting, entertaining or other recreation.

Refreshing ruling is result of long-time efforts of American Medical Association's Law Department. For detailed information, see J.A.M.A., July 28, 1956, page 1260.

Labeling of Reserpine Products

When reserpine was first introduced the available evidence suggested that it was a drug of very low toxicity, with no contraindications, and with a wide range of safe dosage. As the drug has been used more extensively it has become increasingly apparent that reserpine is not the innocuous substance it was first thought to be, that there are contraindications, and that the safe level for long term outpatient maintenance is lower than the originally recommended dosage schedule.

A number of firms marketing this drug have voluntarily reduced the dosage they are recommending and have added additional warning statements in their literature to physicians. Firms whose new-drug applications have recently become effective have incorporated many of these changed concepts into their labeling. However, the labeling of many preparations that have been marketed for a longer time fails to reflect these new data.

Papers and exhibits presented at the meeting of the American Medical Association held in Chicago June 11-15, 1956, emphasized the importance of apprising physicians of the latest information on the potential hazards of reserpine. There is an urgent need to bring all reserpine labeling into conformance with the best current available knowledge and to insure that this information reaches the practicing physicians.

In the treatment of hypertension, or of anxiety states on an outpatient basis, it is the present consensus that the usual recommended maintenance dose should be 0.25 mg. daily. While doses up to 1.0 mg. daily may safely be recommended for the initiation of therapy, they usually should not be continued for longer than a week. No substantial benefit is obtained by larger doses sufficient to compensate for the added hazard. An occasional patient may require up to 0.5 mg. daily as a maintenance dose, but if adequate response is not obtained from this dosage, it is well to consider adding another hypotensive agent to the regimen rather than increasing the dose of reserpine.

Continued use of reserpine in doses of 0.32 mg. daily has been shown to increase gastric secretion and gastric acidity in a significant number of cases whereas daily doses of 0.25 mg. have not been shown to do so. Doses of 0.5 mg. daily for as short a time as two weeks produced this effect in most of the individuals tested and have resulted in massive gastrointestinal hemorrhage or perforation of an ulcer. More important, reserpine in daily doses of 0.5 or 1.0 mg. produces severe depression in a significant number of individuals, and has precipitated a very considerable number of suicidal attempts,

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Labeling of Reserpine Products

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some of them successful. Many of these depressions have been severe enough to necessitate long-term hospitalization in psychiatric institutions. For these reasons it is believed that reserpine in daily doses above 0.25 mg. is contraindicated and in lower doses should be used with caution in patients with a history of mental depression, peptic ulcer or ulcerative colitis. Furthermore, physicians should be specifically cautioned with respect to the danger of depression, and should be urged to follow their patients carefully with this in mind, and to alert responsible members of the family to the hazards. The same general principles should apply to the labeling of Rauwolfia serpentina.

The optimal dose of reserpine in the treatment of institutionalized psychotic patients is not equally well established. There is no general agreement as to the safety of dosages higher than 5 mg. daily, and it is believed that the usual maintenance dose should be stated as 2.0 mg. daily. Labeling of the higher strength tablets of reserpine intended for neuropsychiatric use should contain prominent warnings that reserpine should be discontinued for approximately one week before instituting shock therapy, since it may result in increased severity of convulsions, respiratory difficulty, and other complications; that a syndrome suggestive of Parkinsonism develops frequently in patients on large doses of reserpine but is usually reversible upon lowering the dosage or discontinuing the drug; and that the possible dangers of hypotension and fluid retention should be borne in mind when large doses are used in debilitated patients or those with cardiac disease.

Reserpine tablets of 0.1, 0.25 or 0.5 mg. are suitable for the treatment of hypertension and mild anxiety states. Reserpine tablets of 0.75 mg. potency or higher are suitable only for use in the neuropsychiatric treatment of hospitalized patients under carefully controlled conditions, and the labels should state "For neuropsychiatric use only." In view of the wide variety of dosage forms available it is important that the label declaration of the strength of the tablet should be very prominent, and preferably should be of a different color from the rest of the label in order to obviate any chance of 1.0 mg. tablets, for instance, being dispensed in error as 0.1 mg. tablets.

FOOD AND DRUG ADMINISTRATION
Department of Health, Education, and Welfare
Washington 25, D. C.

C. M. A. ANNUAL SESSION
Los Angeles
April 28 - May 1, 1957

New Artificial Kidney Has Disposable Parts

A new "tin can and garden hose" artificial kidney has been devised for use among patients with serious kidney failure, three Cleveland physicians recently reported.

Tank and pumps for the kidney cost about $500 and the inexpensive filtering units are disposable. It works almost as well as the best equipment now available, according to Drs. Willem J. Koliff, Bruno Watschinger, and Victor Vertes. They described it in a recent issue of the *Journal of the American Medical Association.*

The mechanical kidney is used to "wash" the blood of patients suffering kidney failure or uremia, which results in the poisoning of the blood stream by elements usually eliminated in the urine. Dialysis, or "ultra-filtration," of the circulating blood gets rid of these elements and stops the convulsions, nausea, and possibly-fatal results of kidney failure.

The tin-can unit is especially useful since its filter parts can be thrown away after each use, bypassing the usual cleaning, sterilizing, and setting up which take much time.

The filtering unit is made of a 10-ounce fruit can and coils of cellulose tubing separated by fiberglass screens, all set into a larger can. This is sealed for shipping and can be opened with an ordinary can opener when needed.

Blood from a patient's artery circulates through the tubing, which is coiled around the smaller fruit can. Washing solution enters the bottom of this can through a garden hose connection, bubbles up over the top of the can, and flows down through the screened tubing, carrying with it the unwanted elements in the blood. None of the plasma or other essentials in the blood can wash out through the screening. The filtered blood is continually returned to the body through a vein.

The physicians reported eight cases in which the coil kidney was used. Five of them were suffering such severe kidney disease and heart-circulatory disorders that no lasting improvement could be expected, but immediate results were good. Three other patients recovered completely from acute kidney failure, including one whose life was probably saved by prompt use of the equipment, the doctors said.

The physicians are from the research division of the Cleveland Clinic Foundation and the Frank E. Bunts Educational Institute. The artificial kidney, to be produced by an Illinois laboratory, is not yet commercially available.